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SYNTHESIS: EXPLORATORY ON THE STATE OF RESEARCH



CONGO

[WEST AND CENTRAL AFRICA]

This paper summarizes the findings of an exploratory study on the state of the development research environment in the Congo. The objective of the study was to inform the Centre on the national context, the potential and weaknesses of the research system, the external partners involved and possible areas of collaboration.

National context

The Congo belongs to the monetary zone covered by the Bank of Central African States (BEAC), which also includes Cameroon, Gabon, the Central African Republic, Chad and Equatorial Guinea.

Following the deterioration of the economy due to the policies implemented and to recurring conflicts, the Government set up a 2000-2002 Interim Post-Conflict Programme (Programme Intérimaire Post Conflit, or PIPC). The plan was designed to enable the Congo to reduce its economic dependency on petroleum and establish a new development strategy focusing on communications, telecommunications and hydraulic energy infrastructures. Agriculture, herding, forestry and petroleum were additional pillars. As a result, the share of investment spending devoted to infrastructures has more than tripled since 1998, reaching 50.99% of total spending in 2003, whereas the share allotted to education and health has declined sharply in recent years, representing respectively 0.8% and 5% in 2003.

Over the 2005-2007 period, to create an enabling environment for the consolidation of growth and the fight against poverty, the government developed a Three-Year Public Investment Programme (Programme Triennal d'Investissement Public, or PTIP) which, in addition to the abovementioned

pillars, also included urgent action in the areas of women's advancement and gender. An agreement was also signed with the IMF, establishing a Poverty Reduction and Growth Facility (PRGF). This agreement paved the way to achieving World Bank support for the funding of economic and financial support programmes and the preparation of a PRSP. In March 2006, the World Bank and the IMF approved the Republic of the Congo's access to the Heavily Indebted Poor Countries Initiative (HIPC). Furthermore, for around a decade now, the Congo has received additional support from organizations including CIDA, French cooperation, USAID and various United Nations agencies (UNDP, WFP, FAO, etc.). However, the impact in terms of scientific and technical cooperation remains very low despite the fact that the security situation has practically returned to normal. The areas benefiting from funding include: agro-resource processing, forestry, natural resources and the environment.

The national scientific and technical research system

Institutional organization

Since 1974, the improvement of the national scientific and technical research system has remained a focus of attention for the political and administrative authorities of the Congo. In 1995, a law was passed to define the orientation and programming of scientific and technological development, stipulating that the State established science and technology in general, and scientific and technological research and experimental development in particular, as national priorities.

In terms of organization, the law established:

- a High Council of Science and Technology (Conseil Supérieur de la Science et de la Technologie, CSST);
- a General Delegation of Scientific and Technological Research (Délégation Générale de la Recherche Scientifique et Technologique, DGRST) whose mission is to implement national policy on science and technology. It supervises 11 research centres and 8 research units which are attached to the centres and execute their programmes. The Delegation also collaborates with two institutes through convention arrangements: IRD (EPRAN project) and UR2PI;
- an Interministerial Committee on Science and Technology and Research Organizations (Comité Interministériel de la Science et de la Technologie et des organismes de recherche, CIST).

Thus, the institutional management of scientific research is organized around the Ministry of Science and Technological Innovation, assisted by the CSST, the DGRST, the CIST and Marien Ngouabi University. Despite some difficulties, the DGRST and its research centres and units are operational, contrary to the CSST and CIST. The financial resources devoted to research and development are largely provided by the budget of the State.

Marien Ngouabi University comprises 11 centres (faculties, institutes and schools), with a student body numbering approximately 11,500 in 2003.

On the other hand, while scientific cooperation has always been a concern of the Congolese scientific community, in both public and private research institutes, membership in networks remains minimal and tends to consist of collaborations with a handful of foreign institutes. Such agreements allow teaching researchers and doctoral students to be relatively mobile. The agreements often ensure the provision of recent documentation.

Research capacity

A review of individual and collective scientific production and involvement in various projects demonstrates that a very high proportion of researchers show great scientific value and are able to lead major research and development projects at the regional or international level.

Research expertise is provided in the form of consultations, following calls for offers by organizations, administrative departments or NGOs.

While remaining relatively modest, the total amount of public financial resources allocated to research has experienced steady growth. Indeed, at the DGRST, total public resources grew from 737 million in 1984 to 1,468 million in 2004. The same trend can be witnessed at Marien Ngouabi University, where financing nearly doubled from 5,161 million in 1985 to 9,372 million in 2001.

Human resources are significant: with a total of 887 researchers for a population of 3 million, the Congo more than meets the standards laid down by UNESCO in 1974: to wit that every country with a GDP of more than 200 dollars per capita should assign at least 200 scientists and engineers to experimental research and development activities. Marien Ngouabi University is governed by a statute described as relatively high paying.

On the national territory of the Congo, high-level scientific researchers in a wide range of fields live and work and participate quite actively in the international scientific community.

Naturally, resource issues have an impact on the quality of the work produced by Congolese researchers. In the six most important institutes, facilities are available but renovations are needed. And means of communication are very insufficient.

Also, while the quality of publications is satisfactory, their number is low; the annals of Marien Ngouabi University are operational, but only one or two out of every four planned issues are actually published. And, while in theory it is possible for researchers to participate in international conferences, budget unavailability makes it difficult in practice.

The overall human resource picture as at 31 December 2004 shows that the DGRST, Marien Ngouabi University and the research centres have a relatively limited human potential, indicating a certain unbalance due to an inappropriate ratio of teaching researchers to technical researchers, an uneven distribution of specialists, a glut of teaching researchers and a low number of lecturing scientists.

The share of funding from external assistance through bilateral and multilateral cooperation has dropped steadily. The budgets allotted to the DGRST have experienced growing difficulties in terms of payouts from the National Treasury. Indeed, a budget of 800 million francs was allotted in 2004 for the running of the research centres and units, but only 63.1% of the allotted budget was actually paid out.

CONGO

Climate

High rainfall

Forest 65%

Savannah 35%

Population (est. in 2007)

3,800,610

GDP per capita (est. in 2006)

USD \$ 1.400

Agriculture and wood 6.2%

Petroleum and industry 55.3%

Administration and services 38.5%

Infant Mortality

85.29 / 1 000

Literacy

85.8 %

HDI Ranking (2005)

139th / 177

HIV Prevalence

4.9%

N° of Internet Users (Sept. 07)

70,000

Outlooks for IDRC

The recent experience of the Regional Office of IDRC in Congo Brazzaville has been largely positive. The state of the research environment in the aftermath of the socio-political crisis experienced by the country is such that the marginal profits obtained through modest investments far outweigh their marginal costs. This is due to the fact that infrastructures such as buildings are available, which compensate for a lack of computers and other types of equipment.

The teaching researchers at the University have strong capacities and a predominance of new Ph.D. holders. They are as motivated by research as they are concerned with the advancement of their professional careers. The heads of the various organizations and departments are very open to the perspective of revitalizing the prevalent research culture in the Congo. The same attitude can be observed in the Direction de la Recherche scientifique et technique (Scientific and Technical Research Branch) which has already collaborated extensively with IDRC. The interest shown by various individuals in collaborating with IDRC is impressive. Policy-makers themselves seem to be very interested in the research-to-decision-making process.

It remains necessary, however, in light of all the efforts carried out in the Central African region, to conduct an institutional risk assessment on a case-by-case basis.

Useful contacts and links

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On the Republic of the Congo:

www.congo-site.com
www.izf.net/izf/Guide/Congo/Default.htm
www.missioneco.org/congo
www.cnsee.org